UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,921	11/25/2003	Robert Formisano	22602-095373	6790

			EXAMINER
25006	7590	04/21/2006	DUNHAM, JASON B

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ART UNIT	PAPER NUMBER
3625	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/721,921	FORMISANO, ROBERT
	Examiner	Art Unit	
	Jason B. Dunham	3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 November 2003</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 November 2003</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/25/03</u>.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this

application because of uneven shading and small font. Applicant is advised to employ

the services of a competent patent draftsperson outside the Office, as the U.S. Patent

and Trademark Office no longer prepares new drawings. The corrected drawings are

required in reply to the Office action to avoid abandonment of the application. The

requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 9-10, 12-24, and 31-32 are rejected under 35 U.S.C. 102(e) as

being anticipated by Wakelam (U.S. Patent No. 6,859,768).

Referring to claim 1. Wakelam discloses a residential construction cost

estimation process comprising the steps of:

- Inputting project criteria (Wakelam: abstract);

- Selecting design characteristics (Wakelam: abstract);

- Calculating a virtual geometry based on the selected design characteristics and inputted project criteria (Wakelam: abstract);

- Selecting assemblies of construction based on the calculated virtual geometry, selected design characteristics and inputted project criteria (Wakelam: abstract);

- Selecting component options based upon the selected assemblies of construction, the calculated virtual geometry, selected design characteristics and inputted project criteria (Wakelam: abstract);

- Calculating a cost of each of the selected component options (Wakelam: column 3, lines 34 – 46);

- Calculating a summary construction cost of a residence at a component level, wherein the cost is dynamically linked to each of the inputted and selected options of the preceding steps, whereby the cost of the residence may be dynamically modeled at a detailed component level at any stage of the design development process (Wakelam: column 3, lines 34 – 46).

Referring to claim 2. Wakelam further discloses a process wherein the data comprising inputted and selected information is stored in computer memory and the cost is computer calculated, the cost capable of being altered such that a new cost is automatically recalculated at a component level based upon the dynamic interaction of the altered information and the step of calculating a cost of the residence (Wakelam: abstract & column 3, lines 34-46).

Referring to claim 3. Wakelam further discloses a process wherein the step of

identifying a cost includes a computer interaction with a database of cost (Wakelam:

column 3, lines 34-46).

Referring to claim 4-7. Wakelam further discloses a process wherein the

database of costs is adjustable and is adjusted to reflect:

- changing labor and material market conditions (Wakelam: column 13, lines 6-21).

- Changing sales tax rates (Wakelam: figure 1b);

- Changing sub-contractor general conditions costs (Wakelam: figure 1b);

- Escalation for purposes of estimating construction costs at a future construction

  date (Wakelam: figure 1b).

Referring to claim 9. Wakelam further discloses a process wherein the step of

calculating a cost is calculated referencing a total finished area of the residence

(Wakelam: figure 3).

Referring to claim 10. Wake further discloses a process wherein the step of

calculating a cost is calculated referencing a total constructed area of the residence

including finished and unfinished areas (Wakelam: figures 2a-2k).

Referring to claim 12. Wakelam further discloses a process wherein the step of

calculating a cost is calculated upon the unique combination of components and

attributes of the residence (Wakelam: abstract).

Referring to claim 13. Wakelam further discloses a process wherein an alternate

cost at a component level reflecting altered information, can be dynamically compared

to a base line cost at a component level of the originally inputted and selected

information, for documenting the impact of altered information on the cost of the

residence (Wakelam: column 13, lines 35-50).

Referring to claim 14. Wakelam further discloses a process wherein an alternate

cost at a component level reflecting altered information, will self document the

component level impact of altered information on the cost of the residence (Wakelam:

column 13, lines 22-50).

Referring to claim 15. Wakelam further discloses a process including the step of

inputting information into a data collection tool prior to the step of inputting project

criteria (Wakelam: figure 2G).

Referring to claim 16. Wakelam further discloses a process wherein the step of

data collection includes compilation of information entered by a user (Wakelam: figure

2G).

Referring to claim 17. Wakelam further discloses a process wherein the step of

data collection includes representative drawings of the residence (Wakelam: column 3,

line 64 – column 4, line 14).

Referring to claim 18. Wakelam further discloses a process wherein the step of

data collection includes a web-based interface that collects and directly inputs the

project criteria (Wakelam: column 7, lines 26-51).

Referring to claim 19. Wakelam further discloses a process wherein the step of

data collection includes a questionnaire with responses inputted into a computer or a

prepared paper form (Wakelam: figure 2G). The examiner notes that entering data in a

prepared form as disclosed by Wakelam in figure 2G is equivalent to filling out a

questionnaire.

Referring to claim 20. Wakelam further discloses a process wherein the step of

calculating a virtual geometry is calculated based upon the inputted project criteria and

the selected design characteristics (Wakelam: abstract).

Referring to claim 21. Wakelam further discloses a process wherein the step of

selecting assemblies of construction includes an interaction of logical formulas

dependent upon the selected design characteristics for self-directing the assemblies of

constructions (Wakelam: figures 4A – 4I).

Referring to claim 22. Wakelam further discloses a process wherein the step of

selecting assemblies of construction includes an interaction of logical formulas

dependent upon the selected design characteristics for self-correcting the assemblies of

construction components (Wakelam: figures 4A – 4I).

Referring to claim 23. Wakelam further discloses a process wherein the step of

selecting component options includes an interaction of logical formulas dependent upon

the selected system construction components for self-directing the component options

(Wakelam: column 8, lines 17-37).

Referring to claim 24. Wakelam further discloses a process wherein the step of

selecting component options includes an interaction of logical formulas dependent upon

the selected system construction components for self-correcting the component options

(Wakelam: column 8, lines 17-37).

Referring to claim 31. Wakelam further discloses a process including outputting

functionally descriptive material capable of use in a general building specification

(Wakelam: column 1, lines 7-12).

Referring to claim 32. Claim 32 is rejected under the same rationale set forth

above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8,11, and 25-30 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wakelam (U.S. Patent No. 6,859,768) in view of Burns (U.S.

Patent No. 5,189,606).

Referring to claims 8 and 11. Wakelam discloses all of the above as noted under

the 102 rejection but does not expressly disclose a process including identifying a cost

dependent upon geographical location and entering a zip code. Burns discloses a

construction estimation process wherein:

- The step of identifying a cost includes computer interaction with a database of

  geographically dependent factors (Burns: column 17, lines 10-27).

- The database of geographically dependent factors is based upon an entered zip code and wherein the geographically dependent factors may be selected from the group consisting of:
  - City, state, construction market adjustment factor, labor or material adjustment factor, sales tax rate, sub-constractor general conditions, and escalation (Burns: column 17, lines 10-27).

It would have been obvious to one of ordinary skill in the art to have to modified the process of Wakelam to have included identifying a cost dependent upon geographical location and entering a zip code, as taught by Burns, in order to identify cost differences based on location (Burns: column 17, lines 10-27).

Referring to claim 25-30. Wakelam discloses all of the above as noted under the 102 rejection but does not expressly disclose a process including calculating an energy model. Burns discloses a construction estimation process wherein:

- An energy model of the residence is calculated (Burns: figure 13).
- The step of dynamically calculating an energy model of the residence includes the step of calculating energy consumption based upon the outside ambient temperature (Burns: column 5, lines 57 – column 6, line 3). The examiner notes that Burns discloses calculating an energy model based on climbate conditions and it is well known within the art to perform calculations based upon the heat loss per hour, the AFUE rating of a furnace, the difference between the indoor design temperature and the outside design dry bulb temperature, a correction factor that includes the effects of rated full load efficiency, part load performance,

over sizing and energy conservation devices, an additional empirical correction factor for heating effect versus 65 degree F days, the heating degree days for the geographic location of the residence and the energy fuel value of the heating fuel used.

- The step of dynamically calculating an energy model of the residence includes calculating a heating energy cost based on the energy consumption calculation and a fuel cost selected from the group consisting of: cost per Therm, cost per gallon, and cost per kwh (Burns: figure 13).

- The step of dynamically calculating an energy model of the residence includes an interaction with a database of geographically dependent factors (Burns: column 17, lines 10-27).

- The geographically dependent factors comprise outside design dry bulb temperature and annual heating degree days (Burns: column 5, lines 57 – column 6, line 3).

- The geographically dependent factors are selected by zip code (Burns: column 17, lines 10-27).

It would have been obvious to one of ordinary skill in the art to have to modified the process of Wakelam to have included calculating an energy model, as taught by Burns, in order to identify energy cost differences based on location (Burns: column 17, lines 10-27).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Litz (U.S. Patent Application Publication No. 2005/0261930) discloses a method and system for detailed construction estimating.

- Elliot (U.S. Patent No. 6,446,053) discloses a method and system for producing a proposal for a construction project.

- Duenke (U.S. Patent Application Publication) discloses a material and labor cost estimating method and system.

- Attra (U.S. Patent No. 7,006,977) disclose a system for automating and improving home design and construction.

- Moore (U.S. Patent Application Publication No. 2003/0115163) discloses methods and systems for estimating building reconstruction costs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason B. Dunham whose telephone number is 571-272-8109. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogesh Garg can be reached on 571-272-6756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

JBD
Patent Examiner
4/15/05